

WHAT IS CLAIMED IS:

1. A lock assembly for securing a printed circuit assembly to a housing comprising:
 - a pivot point for coupling the lock assembly to the housing; and
 - a lock member capable of rotating and snapping into a detent in the printed circuit assembly to hold the printed circuit assembly in place.
2. The lock assembly according to Claim 1 wherein:
the lock member is constructed from sheet metal.
3. The lock assembly according to Claim 1 wherein:
the lock member couples to the housing only at the pivot point and is flexible so that the lock assembly applies a pre-load to the printed circuit assembly.
4. The lock assembly according to Claim 1 wherein:
all components of the lock assembly affix to the housing so that no additional parts or hardware are used to secure the printed circuit assembly.
5. The lock assembly according to Claim 1 further comprising:
a finger access detail formed into the lock member.
6. The lock assembly according to Claim 1 wherein:
the housing is a hard disk drive housing; and
the printed circuit assembly is a hard disk drive printed circuit assembly.
7. An electronic device comprising:
a housing; and
a lock assembly capable of securing a printed circuit assembly to the housing, the lock assembly comprising:
 - a pivot point for coupling the lock assembly to the housing; and
 - a lock member capable of rotating and snapping into a detent in the printed circuit assembly to hold the printed circuit assembly in place.

8. The electronic device according to Claim 7 further comprising:
keyways attached to the housing capable of accepting and seating the printed
circuit assembly.
9. The electronic device according to Claim 8 further comprising:
the printed circuit assembly contoured to fit in the keyways and capable of being
secured by the lock assembly.
10. The electronic device according to Claim 7 wherein:
the lock member is constructed from sheet metal.
11. The electronic device according to Claim 7 wherein:
the lock member couples to the housing only at the pivot point and is flexible so
that the lock assembly applies a pre-load to the printed circuit assembly.
12. The electronic device according to Claim 7 wherein:
all components of the lock assembly attach to the housing so that no separate parts
or hardware are used to secure the printed circuit assembly.
13. The electronic device according to Claim 7 further comprising:
a finger access detail formed into the lock member.
14. The electronic device according to Claim 7 wherein:
the housing is a hard disk drive housing; and
the printed circuit assembly is a hard disk drive printed circuit assembly.
15. A method for securing a printed circuit assembly to an electronic device
comprising:
coupling a lock assembly to a housing so that the lock assembly can be rotated
through an extended position and a retracted position;
providing a printed circuit assembly configuration that is capable of fitting over
keyways coupled to the housing;

inserting the printed circuit assembly in alignment with the keyways with the lock assembly in the retracted position; and
rotating the lock assembly over the printed circuit assembly and securing the printed circuit assembly.

16. The method according to Claim 15 further comprising:
snapping the lock assembly into a detent in the printed circuit assembly to hold the printed circuit assembly in place.

17. The method according to Claim 15 further comprising:
locking the printed circuit assembly into place via a single piece lock assembly that is integral with the housing so that no separate parts or hardware are required to secure the printed circuit assembly.

18. The method according to Claim 15 further comprising:
applying a preload to the printed circuit assembly that secures the printed circuit assembly to the housing.

19. The method according to Claim 15 wherein:
the housing is a hard disk drive housing; and
the printed circuit assembly is a hard disk drive printed circuit assembly.

20. An electronic device comprising:
means for housing electronic and/or electromechanical components;
means for securing a printed circuit assembly to the housing means;
means for pivotally coupling the securing means to the housing means so that the securing means can be rotated between an extended position and a retracted position; and
means for keying the printed circuit assembly to the housing means.